

challenging perceptions of the natural and built environments in first-year college students

2019 NACTA Conference

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  - landscape architecture & environmental planning, utah state university
  - extension & teaching assignments
    - usu 1010 university connections
    - laep 1030 introduction to landscape architecture
    - laep 2039 foundations of sustainable systems
    - laep 3120 land planning for residential development
- director, utah state university botanical center - 2007-2014
- associate director, utah state university botanical center - 1994-2007
- areas of study
  - social & environmental performance in the built world
    - public gardens
    - resource conservation
      - water conservation
      - use of native & well-adapted, non-invasive
      - social response
    - water quality
    - stormwater management
    - interpretation

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## laep 1030 introduction to landscape architecture











- Significant growth in delivery
  - Currently:
    - Two face-to-face sections per semester (180 students each)
    - A third face-to-face section will be added spring 2020
    - Online
  - 2018-19 academic year
    - 700+ students in face-to-face sections
    - 250+ students in online sections

## 2018-19 academic year at USU

- LAEP 1030 (all sections) made up 19% of all Breadth-Creative Arts enrollment for the 2018-19 academic year.
- That is 3<sup>rd</sup> most on the Breadth-Creative Arts list (behind Music and Art & Design)



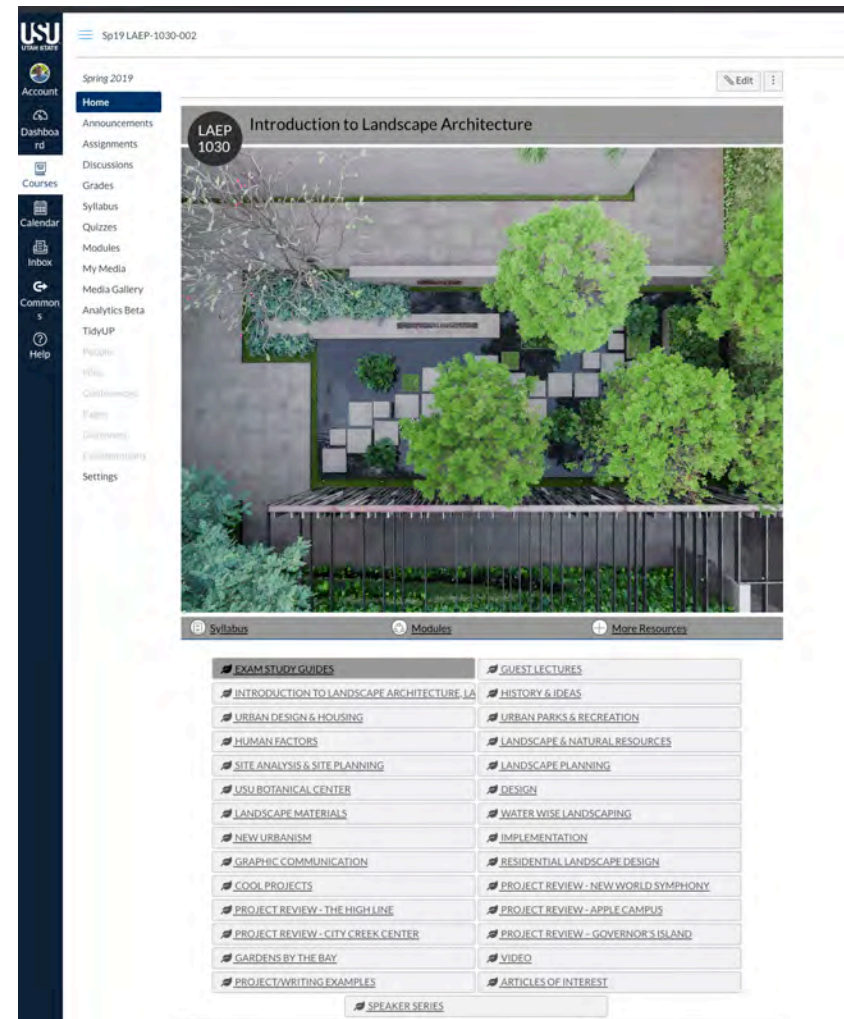
# Spring 2019 Top 3 Course at USU by Page Views (Canvas)

| <input type="checkbox"/> | CourseName   | Pageviews  |  |
|--------------------------|---|---|---|
|                          |   |   | <b>17,775,124</b><br>% of Total: 44.46% (39,982,383)                                |
| <input type="checkbox"/> |   |   | <b>177,469</b> (1.00%)  |
| <input type="checkbox"/> |   |   | <b>152,310</b> (0.86%)  |
| <input type="checkbox"/> | 3. Sp19 LAEP-1030-002    |   | <b>151,928</b> (0.85%)  |
| <input type="checkbox"/> |   |   | <b>144,961</b> (0.82%)  |

Face-to-face sections were merged - appearing as Section 002  
Data from Google Analytics

# Spring 2019 – LAEP 1030 Spring Semester

- There were 3,915 Spring 2019 Canvas Courses tracked in Google Analytics.
- Of those, **LAEP 1030** was the 3<sup>rd</sup> most visited course with 151,928 total page views.



laep 1030

## course objectives

- Gain factual knowledge about the discipline of landscape architecture by presenting an historical overview of the origins of human interaction with the designed landscape
- Gain a broader understanding and appreciation of intellectual/cultural activities of landscape architecture by:
  - examining the major professional activities and central ideas of the profession of landscape architecture
  - developing a sense of landscape appreciation and ethics
- Learn fundamental principles and generalizations of landscape architecture by:
  - conveying an understanding of the planning and design process utilized by landscape architects
- Acquire an interest in learning more about landscape architecture



laep 1030

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## Differences between *LAND* & *LANDSCAPE*



Differences between *LAND* & *LANDSCAPE* – *the degree of man's influence*



- Differences between *LAND* & *LANDSCAPE*



- *FEAR*

- of unpredictable forces of nature, desire for security (primitive peoples)



- *ADAPTATION*

- growing self-confidence, humans understand the processes of nature and their own limitations



- *AGGRESSION*

- present situation, conquest of the environment, exploitation and waste of natural resources



- *STEWARDSHIP*

- renewed understanding into workings of nature – social and environmental awareness





laep 1030

## developing a sense of landscape appreciation & ethics

- Increase awareness of the natural and built world – learn to observe
- Begin to develop an 'ethic' regarding relationship with the environment
  - What is my personal 'land ethic'?
- Understand that people have a significant impact – when we design/build things
- Begin to understand that all attributes of the natural world are interrelated – i.e. geology, water, slope, vegetation, wildlife, etc.
- AND, when we tamper/modify/change things, there WILL be a consequence.
- Begin to understand the need to think critically about these issues

laep 1030

## developing a sense of landscape appreciation & ethics

- In Spring 2019, 66% of students enrolled in LAEP 1030 were freshman, and 27% were sophomores.
- At the beginning of the semester, only 13% of the students indicated they were aware or very aware of the field of landscape architecture



laep 1030

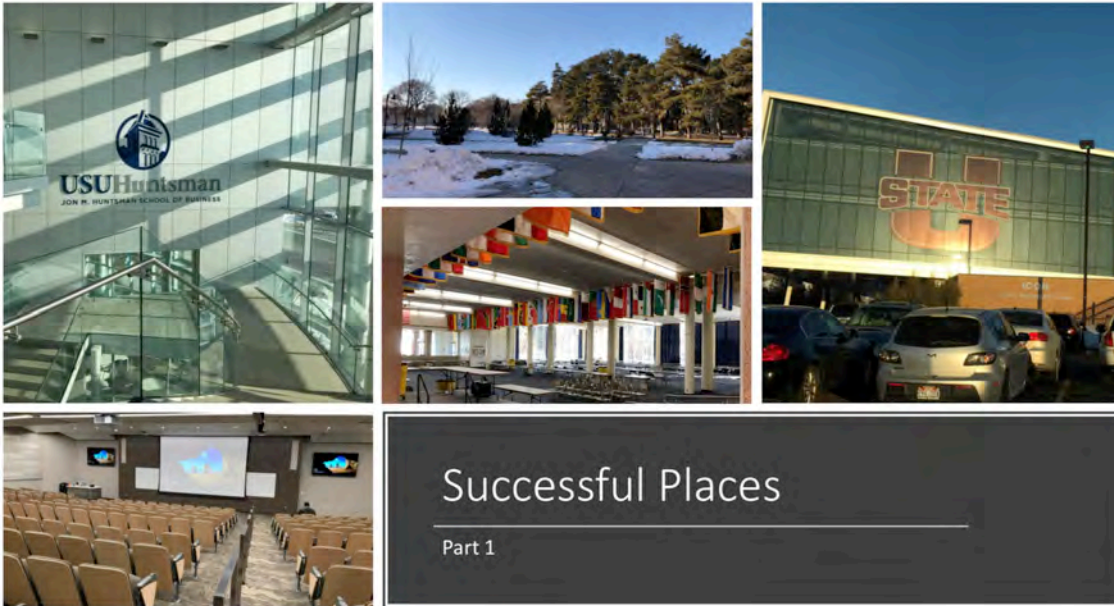
## developing a sense of landscape appreciation & ethics

Use of hands-on projects to understand the design process and strengthen the relationship and understanding of the natural world.

- **Snapshot**
- **Park Design**
- **Residential Landscape Design**
- In addition, ecological footprint calculation, guest lectures, video, discussion questions, and exams are incorporated into the course.



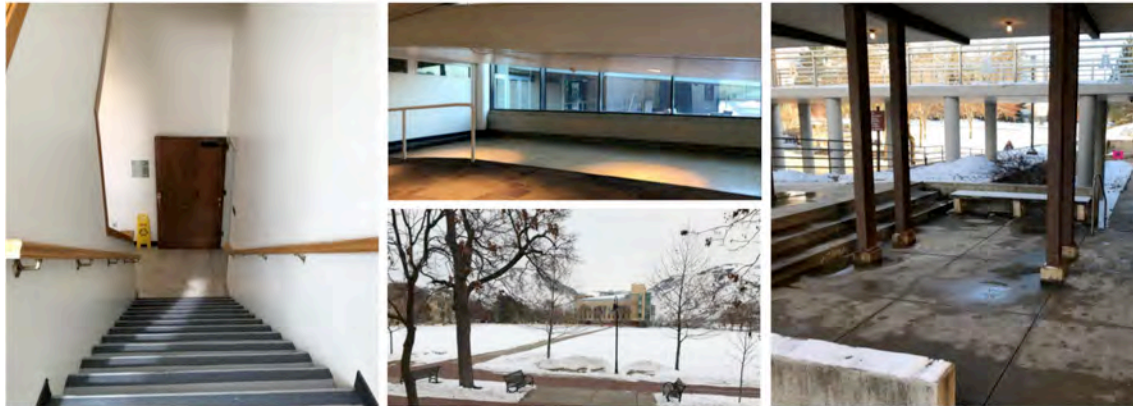
projects  
snapshot – teams of 2



Library Successful

- Quiet area for students to study and do homework.
- Access to resources and help such as books and computers.
- Well organized interior making it easy to find what you need.
- Bookshelves also acts as a sort of site lines.

# projects snapshot – teams of 2



## Unsuccessful Places

Part 1



## East side of TSC

Unsuccessful

- Supports are in the way for pedestrians walking on the sidewalk.
- It can be difficult to get through this area during times of high congestion.
- It is not aesthetically appealing since the supports are bare and not interesting.
- There is especially poor placement of the poles at the bottom of the steps.

# projects park design – in-class, teams of 5

LAEP 1030

site analysis, program analysis & conceptualization

## PROBLEM:

Conceptual Design of a new public park – LAKE TAHOE

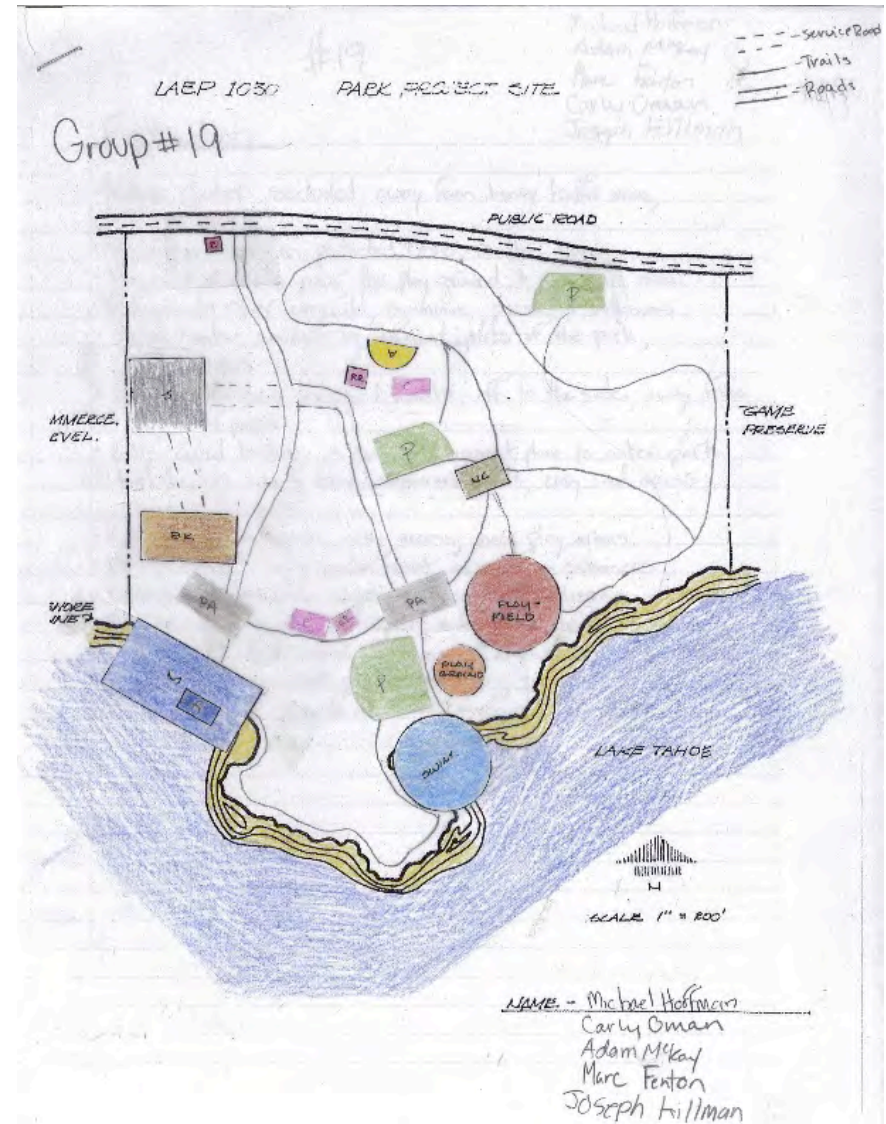
Given the following PROGRAM ELEMENTS (components, parts, and pieces of the design), develop the best possible **FUNCTIONAL ARRANGEMENTS** between the program elements.

### PROGRAM ELEMENT

- Nature Center
- Swimming area (beach, not a pool)
- Playfields
- Playground (equipment)
- Nature Trails
- Boat Repair
- Entry Control Building
- Amphitheater
- Picnicking
- Marina & Rentals
- Restroom
- Service Yard
- Concession/Bath House
- Roads
- Parking



N = NATURE  
F = FAR AWAY  
B = NO RELATION



Wood Fence (around perimeter)

Chicken Coop

Fire Pit

Flower beds (throughout yard)

Shed

Pool House

Gathering Area

Water Feature

Swimming Pool

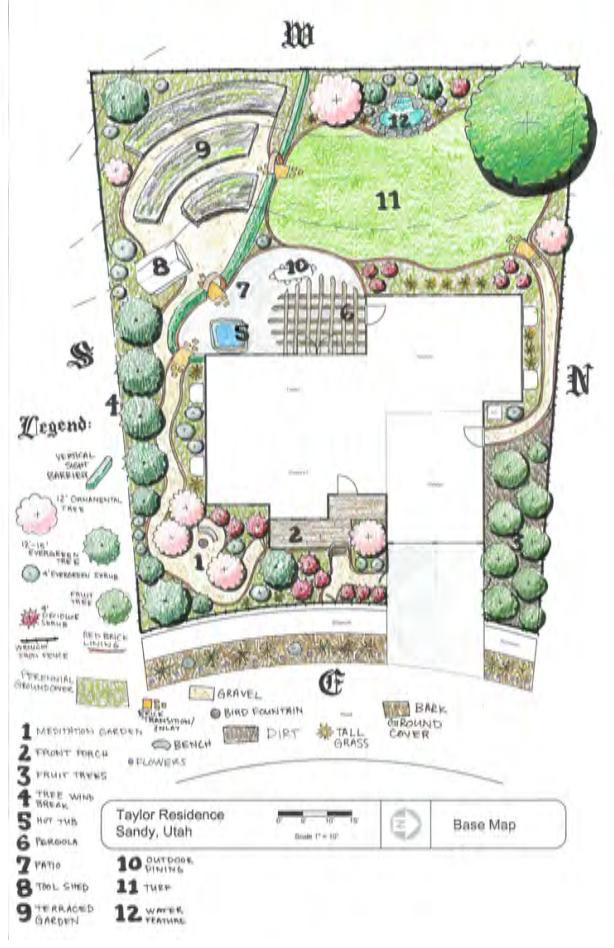
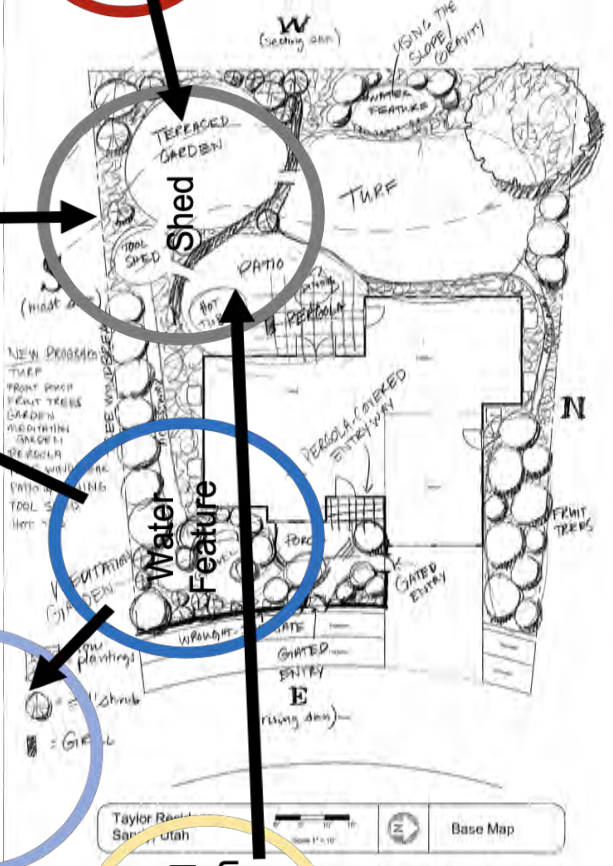
BBQ

Vegetable Garden

Basketball Court

Grass Play Area

Dog Pen



commercial landscape design - 2 parts, individual or teams of two

Wood Fence (around perimeter)

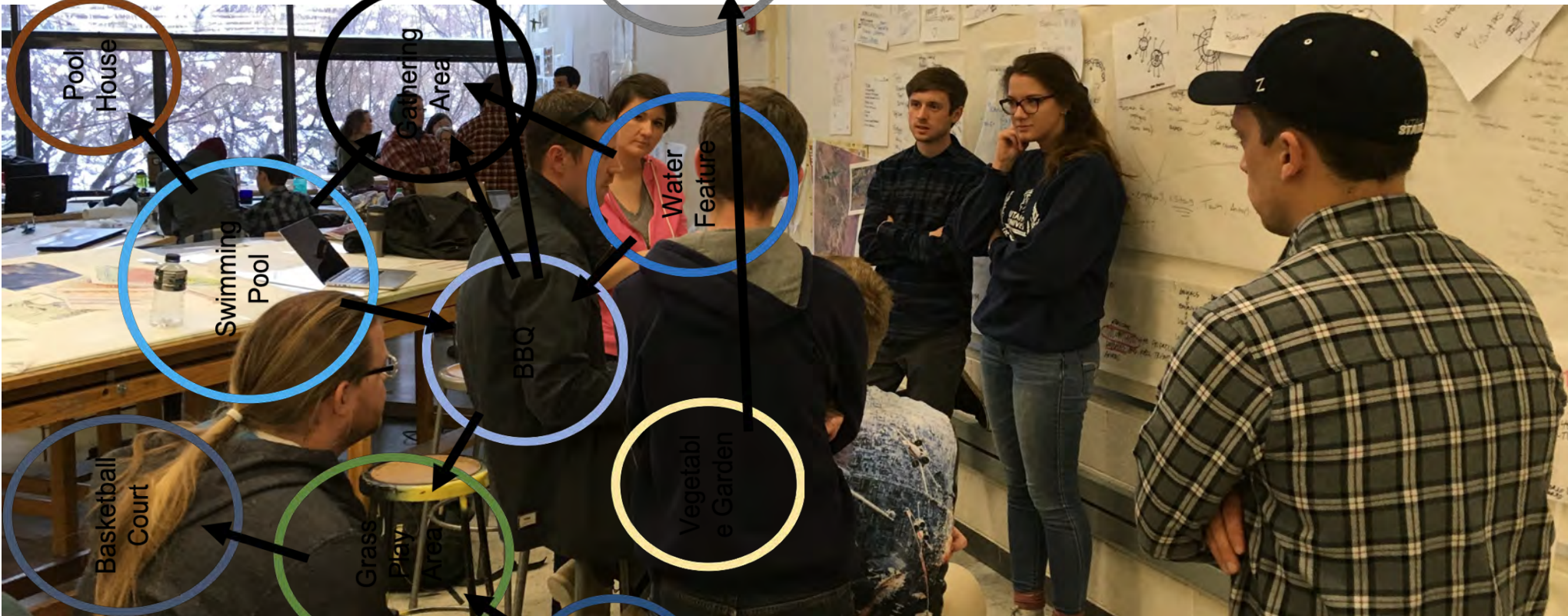
Chicken Coop

Fire Pit

Lower beds (throughout yard)

Post project survey indicates 86% of students rated the hands-on park projects as a 7/10 or better. 58% indicated they were interested in doing similar projects in the future (7/10 or better).

Shed



Pool House

Gathering Area

Water Feature

Swimming Pool

BBQ

Vegetable Garden

Basketball Court

Grass Play Area

Dog Pen

Shade structures (throughout yard)

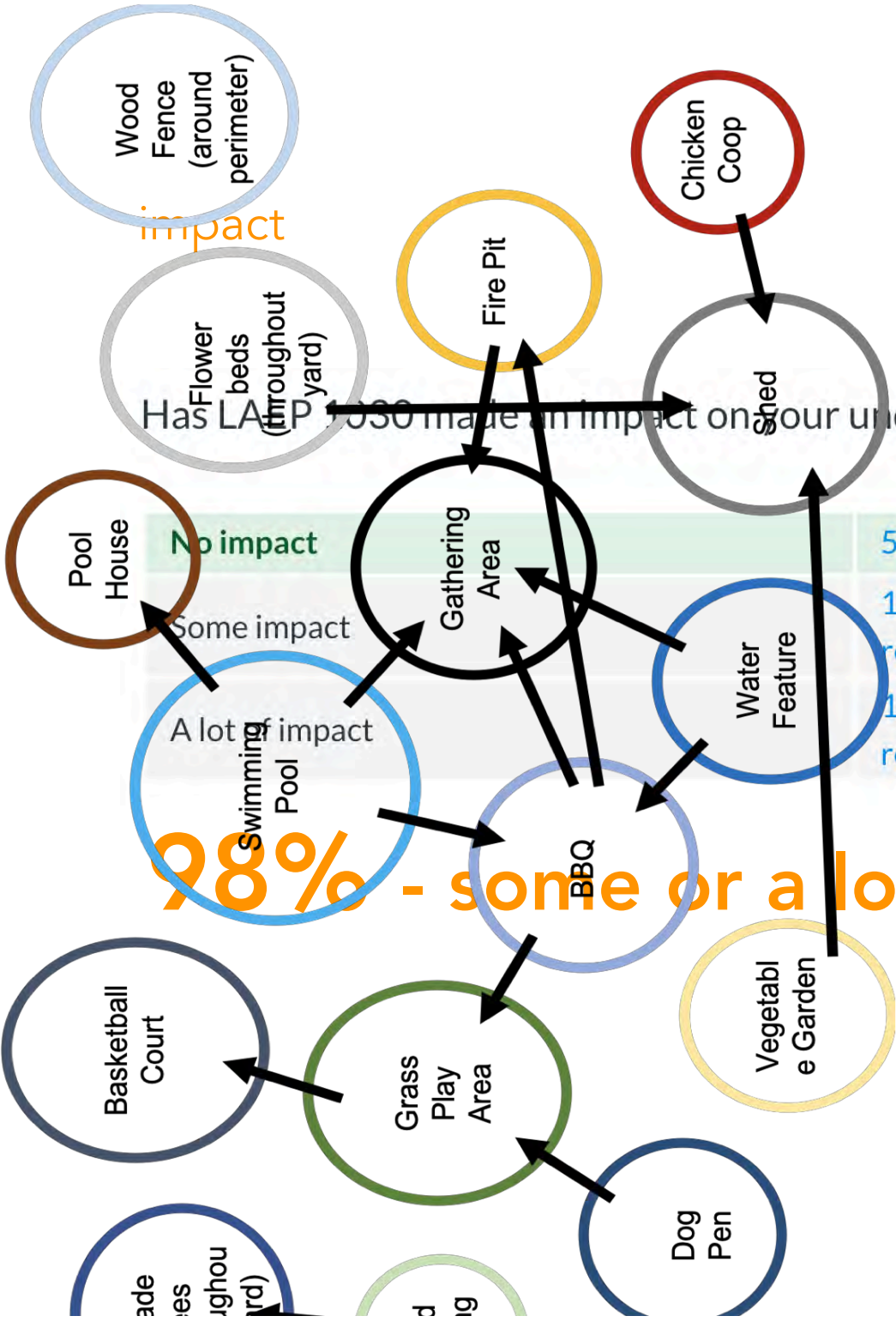
Planting



Has LAP 1050 made an impact on your understanding of the natural world?

|                 |                 |     |   |
|-----------------|-----------------|-----|---|
| No impact       | 5 respondents   | 2%  | ✓ |
| Some impact     | 142 respondents | 47% |   |
| A lot of impact | 157 respondents | 52% |   |

**98%** - some or a lot of impact



Has LAEP 1030 made an impact on your understanding of the natural world?

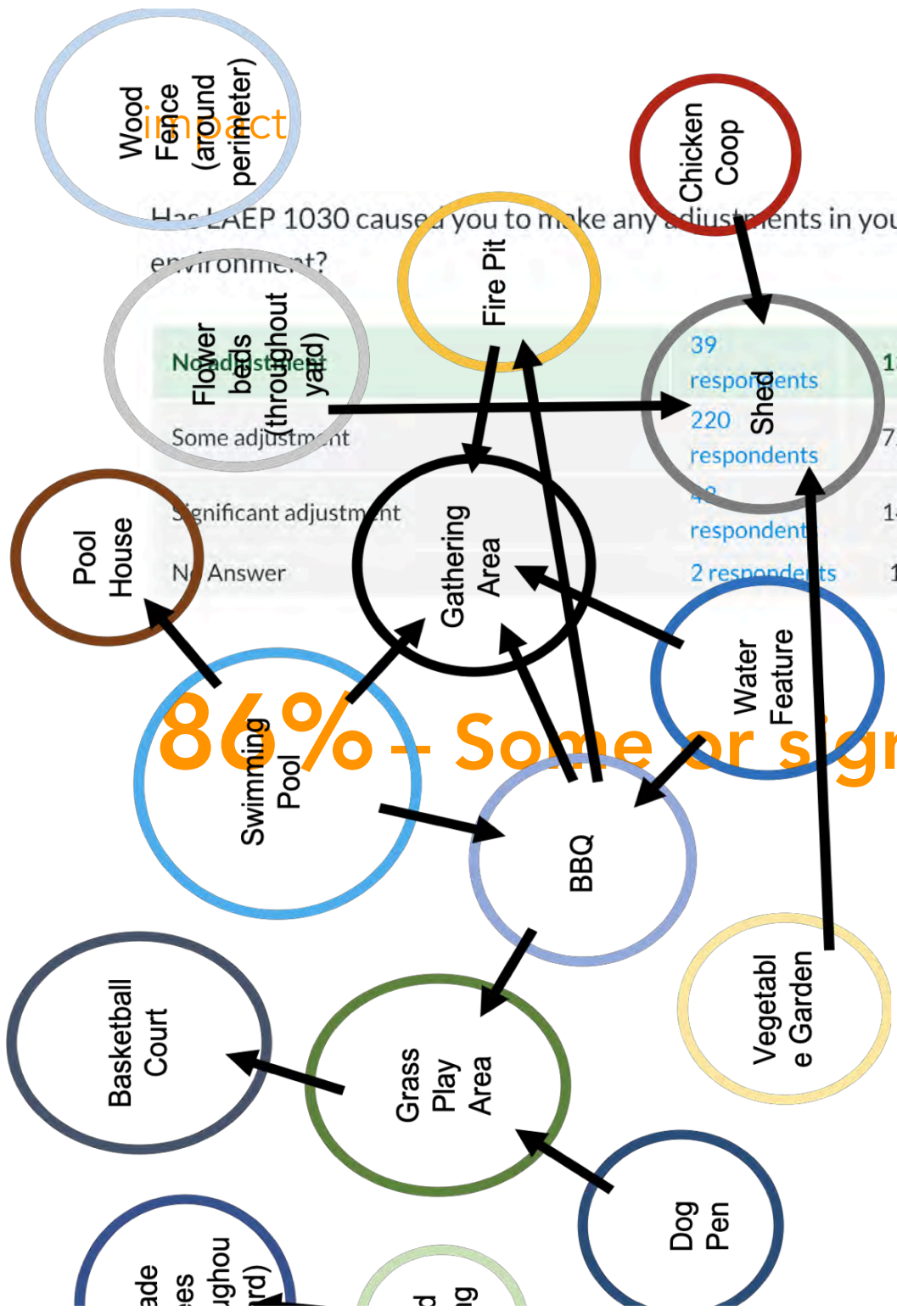
It's been a thought-provoker in how I've currently and things I'm able to do to improve my environment. It's also taught me that we should carefully consider how we develop and use outdoor spaces and that industrial land can be fixed.

After taking this course I think that overall I am more environmentally conscious. I think most of this comes from the first lectures talking about fear, aggression, and stewardship. **It sounds kind of stupid but the phrase "Would a steward do that?" has popped into my head when faced with decisions that would impact the environment.**

LAEP 1030 has impacted my understanding of the natural world by showing me the problems we have. **We're running out of resources and using them ineffectively and I didn't know before. Now I'm more motivated to be conscious of the ecological footprint I leave.**

This class has helped me to see globally what our world is made up of. **It has caused me to be more aware of my surroundings and see the world not just as an object but something that is living.** It has helped me to be more aware of the resources I use and to be more conservative.





Has LAEP 1030 caused you to make any adjustments in your interaction with the environment?



86% - Some or significant adjustment

Wood Fence (around perimeter)

Chicken Coop

Has LAEP 1030 caused you to make any adjustments in your interaction with the environment?

Flower beds throughout yard

Fire Pit

I often take the shuttle buses to class and car pool where I need to go. I now turn off the lights when I leave my room and take shorter showers.

Shed

Pool House

I learned that we consume quite a bit as humans and that for me personally it would take 3.3 earths to sustain everyone if they lived like me. I try to consume less. Things like more fuel efficient driving and less energy use. I also view areas that might have an environmental impacts and think what I could do to help.

Gathering Area

Primarily climate change and emissions. I've done my best to use less idle time and to avoid drive throughs as much as possible.

Water Feature

Swimming Pool

Water-wise landscaping. Since I announced I was taking this class (as a breadth requirement), I was suddenly appointed landscape architect for the backyard, and I've put serious thought into converting dwindling flowerbeds and gardens into a xeriscape experience using plants from where we lived in Wyoming.

BBC

Basketball Court

I notice things now that I didn't before and when I look at things I think of WAY different things than I used to. I used to say, "yea its ok". Now I look deeper into things and notice small details that I've never seen before,

Grass Play Area

Vegetable Garden

Flower beds throughout yard

dog

Dog Pen

Wood Fence (around perimeter)

Chicken Coop

in summary ...

- students enroll in a Breadth Creative Arts Gen Ed course – not knowing anything about landscape architecture and what landscape architects do
- By learning about a profession, they begin to develop an understanding of the natural world around them – and the impact people have on it. A 'landscape ethic' begins to form
- Landscape architects are generally 'romantic' in their approach – and keen on the natural world
- It is an action-oriented profession – where 'the rubber meets the road' vs other basic Gen Ed courses that may be a bit too theoretical (e.g. chemistry (how does it help?))
- Perhaps students learn from this applied course – and take away meaningful understanding about the world around them – and how they can live in it.

Flower beds (throughout year)

Firepit

Steal

Pool House

Gathering Area

Water Feature

NELSON BYRD WOLTZ LANDSCAPE ARCHITECTS

Swimming Pool

BF

MENU

Basketball Court

Grass Play Area

Vegetable Garden

you

Dog Pen

